

**AMENDMENTS TO THE SPECIFICATION**

**Please insert the following paragraph before the first sentence of the application at page 1, line 1:**

This application is the national phase entry under 35 U.S.C. §371 of International Application No. PCT/EP2003/014226 filed on December 15, 2003, entitled, "Method and Plant for Controlling Process Conditions in a Reactor" which claims the benefit of German Patent Application No. 102 60 943.8 filed on December 20, 2002.

**Please insert the following paragraphs at page 2 line 9:**

The US 5,226,374 discloses a method of controlling combustion in a fluidized-bed incinerator comprising measuring a supply rate of incineration waste. When the supply rate of incineration waste is higher than a predetermined value, the supply rate of the incineration waste of the dust feeder is decreased to suppress a combusting operation. Further, i.e. an induced gas rate of an exhaust gas induced blower of the incinerator is increased to suppress an increase in an incinerator internal pressure. The supply rate of incineration waste is measured by a measuring unit using a photoelectric element arranged on a shoot for supplying incineration waste.

The JP 55140008 (Patent Abstracts of Japan) describes a high accuracy control of temperature by measuring the temperature in the fluidized-bed and controlling the amount of floating medium forming the fluidized-bed in order to adjust the temperature.

In the EP 0 093 063 A1 a temperature control of a fluidized-bed reactor is described measuring the temperature in the fluidized-bed of the reactor and varying the temperature of the material transported into the reactor by mixing up material out of two conduits with higher and lower temperature. A similar method is employed in the WO 96/18076 A1 describing a gas cooler having a circulating fluidized-bed. Hot gas is introduced

into a mixing chamber where it is mixed with solids having a temperature lower than that of the gas, whereby the temperature of the mixing chamber settles to a mixing temperature. The mixture of the gas and solids is taken from the mixing chamber via a riser to a solids separator, thereby regulating the temperature of a superheated steam generated in connection with the gas cooling.

**Please insert the following paragraph at page 3 line 10:**

The determination of the material quantity of the material introduced into the reactor consists in the measurement of the pressure and/or of the pressure loss in the conveying line upstream of the reactor. Such a conveying line may in particular be an airlift, with which material is conveyed upwards. The measurement of the pressure or of the differential pressure between start and end of the conveying line of the airlift allows the amount of material which is transported to be accurately deduced. According to the invention, it has been found that this method can be used very accurately even in the case of granular material with-out recourse to density measuring with radioactive material for example.

**Please delete the paragraph beginning at page 6 line 24 as follows:**

~~An especially preferred possibility according to the invention for determining the material quantity of the material introduced into the reactor consists in the measurement of the pressure and/or of the pressure loss in the conveying line upstream of the reactor. Such a conveying line may in particular be an airlift with which material is conveyed upwards. The measurement of the pressure or of the differential pressure between start and end of the conveying line of the airlift allows the amount of material which is transported to be accurately deduced. According to the invention, it has been found that this method can be~~

~~used very accurately even in the case of granular material without recourse to density measuring with radioactive material for example.~~

**Please amend the paragraph beginning at page 7, line 27 as follows:**

~~According to a special embodiment, the~~ The conveying line is a fluid-pressure conveying line, in particular a preferably perpendicularly arranged rising line of an airlift. It has been found that, in contrast to conventional methods of determining the quantity of fine-grained material which is transported in a conveying line, the quantity in a fluid-pressure conveying line can be accurately determined without a large measuring equipment.